as possible, by reducing their velocity. This effect is obtained under the crest of an inverted weir for gases, in the same manner in which it would be done on a weir carrying water, by providing

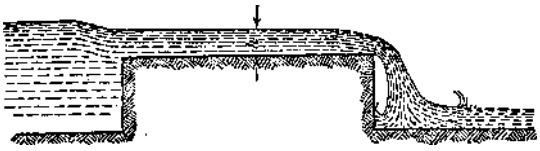

FIG. 34.

a cistern or cutting a deeper reservoir in the weir, making an upstream and a downstream crest.

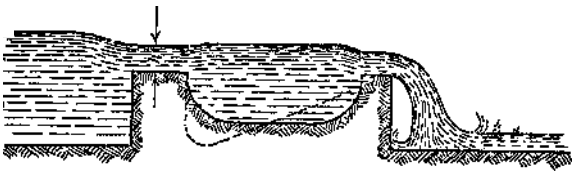

FIG. 35.

When a weir having a thick crest (Fig. 34) is transformed into a weir with a cistern or reservoir (Fig. 35), the velocity of flow of

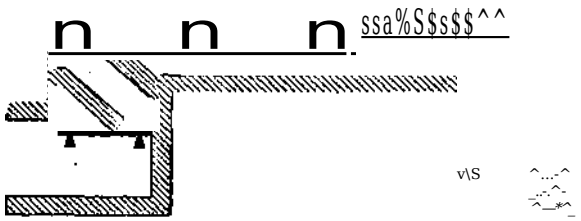

FIG. 36.

the water in the reservoir is reduced, while the level of its free surface remains the same.

In securing this result with an inverted weir for gases, all of the